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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* THOMAS J. HERDER

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Appeal 2008-004578  
Application 09/627,558  
Technology Center 2400

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Decided: August 11, 2009

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Before LANCE LEONARD BARRY, JAY P. LUCAS, and  
THU A. DANG, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

The Patent Examiner rejected claims 1-8 and 10-22. The Appellant appeals therefrom under 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6(b).

#### INVENTION

The invention at issue on appeal biometrically validates a user for an on-line transaction to be effectuated using a transaction card such as a calling card or phone card. (Spec. 7.)

#### ILLUSTRATIVE CLAIM

1. A method of validating a user for a transaction to be effectuated by using a transaction card, comprising:
  - configuring a biometric profile for said user, said biometric profile including a plurality of biometric samples received from the user, the plurality of biometric samples corresponding to a plurality of questions;
  - associating said biometric profile with an indicium assigned to said transaction card;
  - biometrically interrogating said user when said transaction is attempted by said user, wherein said biometrical interrogation includes querying said user for a biometric response associated with a randomly selected one of said plurality of questions;
  - monitoring said biometric response generated with respect to said user in response to the biometrical interrogation;
  - determining if said biometric response matches a biometric sample in said biometric profile corresponding to the randomly selected one of said plurality of questions; and
  - if so, approving said user for said transaction.

PRIOR ART

Weiss	US 4,998,279	Mar. 5, 1991
Fujimoto	US 5,897,616	Apr. 6, 1999
Kanevsky	US 5,897,616	Apr. 27, 1999
Buffam	US 6,185,316	Feb. 6, 2001
Glaze	US 6,320,974	Nov. 20, 2001
Sawyer	US 6,324,271	Nov. 27, 2001
Chmaytelli	US 6,542,729	Apr. 1, 2003

REJECTIONS

Claims 1-3 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Buffam and Kanevsky.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Buffam, Kanevsky, and Fujimoto.

Claims 6 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Buffam, Kanevsky, and Glaze.

Claims 8 and 10<sup>1</sup> stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Buffam, Kanevsky, and Sawyer.

Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Buffam, Kanevsky, Sawyer, and Fujimoto.

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<sup>1</sup> The Reply Brief (p. 3) mistakenly lists claim 9 as part of this rejection. As noted elsewhere therein (p. 2), the Examiner has "indicat[ed] at page 2 of the Examiner's Answer that claim 9 stands objected to as being dependent upon a rejected based claim" rather than rejected.

Claims 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Buffam, Sawyer, Chmaytelli, and Weiss.

Claims 16-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Buffam, Kanevsky, Sawyer, and Weiss.

#### CLAIMS 1-8, 10, 11, AND 16-22

Based on the Appellant's arguments (Appeal Br. 6-21), we will decide the appeal on claims 1-8, 10, 11, and 16-22 on the basis of independent claims 1, 8, and 16 alone. *See* 37 C.F.R. § 41.37(c)(1)(vii). "With this representation in mind, rather than reiterate the positions of the parties *in toto*, we focus on the issue therebetween." *Ex parte Nikoonahad*, No. 2006-3247, 2007 WL 1591636, at \*2 (BPAI 2007).

#### ISSUE

The issue before us is whether the Appellant has shown error in the Examiner's finding that the combined teachings of Buffam and Kanevsky would have suggested querying a user for a biometric response associated with a randomly selected one of a plurality of questions and determining if the response matches a biometric sample in a biometric profile corresponding to the randomly selected question as in claim 1; querying a user for a voice response to a question that is randomly selected from a plurality of personalized questions as in claim 8; and querying a user for a response relating to a randomly selected one of a plurality of biometric samples as in claim 16.

LAW

"The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art." *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991) (citing *In re Keller*, 642 F.2d 413, 425 (CCPA 1981)). "Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references." *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (citing *Keller*, 642 F.2d at 425). In determining obviousness, furthermore, a reference "must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole." *Id.*

FINDINGS OF FACT ("FFs")

1. Buffam discloses that "biometric authentication methods typically employ two modes: enrollment, step 800, and verification, step 805, as illustrated in FIG. 7." (Col. 18, ll. 22-24.)

2. "The enrollment process includes the storing, step 820, of a data set 825 representative of an individual's biological feature (physical characteristic or personal trait) to be used later to verify the user's identity." (*Id.* ll. 27-31.) The biological feature may be "a voice pattern . . . ." (*Id.* l. 41.) "Once the digital representation [of the voice pattern], called the transient template, has been processed to the desired point, it is then stored, usually in some form of user credential 860." (*Id.* ll. 51-54.) "[T]he user credential 160 on which [the] template . . . is stored can be a smartcard . . . ." (Col. 14, ll. 19-20.)

3. "Once the user is enrolled, the biometric is used to verify the user's identity, step 805. When claimant 870 needs to be authenticated, a sample 872 of the user's biological feature is sensed, digitized, and processed. The digitized sample is compared to the stored biometric template, step 875, here stored in credential 860." (Col. 18, l. 64 – col. 19, l. 2.) "A comparison algorithm used in comparator 880 yields a result of how close the live scan is to the stored template. If the result falls into an 'acceptable' range, an affirmative response is given, step 885; if the result falls into an 'unacceptable' range, a negative response is given, step 890." (Col. 19, ll. 5-9.)

4. Kanevsky discloses that "[v]oice-based verification systems are especially useful when it is necessary to identify a user who is requesting telephone access to a service/facility" (col. 2, ll. 1-3); "such services may include . . . telephone services . . . ." (Col. 1, ll. 25-26.) Like Buffman, Kanevsky features enrollment and verification modes.

5. During enrollment, Kanevsky explains that "information in . . . database[s] and . . . user models may be built . . . ." (Col. 7, ll. 41-43.) Specifically, a "speaker may call into the system and, after making an identity claim, the system asks questions and uses the answers to build . . . models . . . ." (*Id.* ll. 44-47.)

6. During verification, Kanevsky explains that "[a] potential user 12 of the service/facility . . . identifies himself via his name, for example, and requests access to the service/facility." (Col. 6, ll. 1-6.) "[U]tilizing the

specific information from the identified user's database, the server 22 generates a random question (or multiple random questions) for the user . . . . The user answers the random question(s) which is sent back to the server 22 . . . ." (*Id.* ll. 24-28.) "The semantic analyzer 40 analyzes the answer to determine if the answer is correct, or not, in accordance with the information in the user's database." (*Id.* ll. 37-39.)

7. The latter reference also discloses that "because of the fact that . . . the questions are random in nature and the entire process is monitored throughout the dialog, even frauders using tape recorders or speech synthesizers cannot fool the system of the invention as such fraudulent processes cannot handle the random questions and/or the dialog in real-time." (Col. 7, l. 64 – col. 8, l. 3.)

#### ANALYSIS

The Examiner is relying on the combined teachings of Buffam and Kanevsky to have suggested the limitations at issue. Buffman queries a user for a voice sample and determines if the sample matches a voice template stored in a credential. (FF 3.)

For its part, Kanevsky queries a user for a voice response to a question that is randomly selected from a plurality of personalized questions and determines if the response matches information in the user's database. (FF 6.) The latter reference explains that the use of random questions improves security. (FF 7.)



We agree with the Examiner's finding that the combined teachings of Buffam and Kanevsky would have suggested querying a user for a biometric response associated with a randomly selected one of a plurality of questions and determining if the response matches a biometric sample in a biometric profile corresponding to the randomly selected question; querying a user for a voice response to a question that is randomly selected from a plurality of personalized questions; and querying a user for a response relating to a randomly selected one of a plurality of biometric samples. The Appellant's arguments (App. Br. 8-10, 12, 13, 19, and 20) attack Kanevsky individually, which cannot establish non-obviousness.

#### CONCLUSION

Based on the aforementioned facts and analysis, we conclude that the Appellant has shown no error in the Examiner's finding that the combined teachings of Buffam and Kanevsky would have suggested querying a user for a biometric response associated with a randomly selected one of a plurality of questions and determining if the response matches a biometric sample in a biometric profile corresponding to the randomly selected question as in claim 1; querying a user for a voice response to a question that is randomly selected from a plurality of personalized questions as in claim 8; and querying a user for a response relating to a randomly selected one of a plurality of biometric samples as in claim 16.

#### CLAIMS 12-15

The issue before us is whether the Appellant has shown error in the Examiner's findings about claims 12-15.

#### LAW

"[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). "On appeal to the Board, an applicant can overcome a rejection by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness." *In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed.Cir. 1998)).

#### FINDINGS OF FACT

##### 8. The Examiner makes the following findings and conclusion.

As per claims 12, Sawyer teaches a network operable with a terminal in association with a transaction card, (Col 4 lines 20-24). Sawyer teaches a controller to handle network queries, (Col 6 lines 8-14). Sawyer teaches submitting a biometric profile for authentication, (Col 7 lines 45-52). Sawyer does not teach submitting the biometric authentication over a network. Sawyer does not teach determining if a fraudulent action is being attempted, and if so, to biometrically interrogate the user.

Chmaytelli teaches an authentication method wherein if a user fails to enter a password correctly the system will lock. Chmaytelli teaches that the user may unlock the system by using a voice recognition procedure, (Col 8 lines 6-20). Weiss teaches submitting biometric indicia over a telephone network to a store with biometric profiles for authentication.

It would have been obvious to one skilled in the art to use the network and biometric store of Weiss with the

biometric authentication of Sawyer, so that the biometric profiles would be in a secure location.

As per claim 13, Buffam-Kanevsky combination fails to teach a calling card. Sawyer teaches the transaction to be placing a calling card call, or accessing an account, (Fig. 1, Col 8 lines 64).

As per claim 14, Buffam-Kanevsky combination teaches using audio" biometrics. Sawyer teaches using a voiceprint, (Col 7 line 50).

As per claim 15 Buffam-Kanevsky combination fails to teach using a fingerprint. Sawyer teaches using a fingerprint, (Col 7 line 50).

(Ans. 7-8.)

9. The "Appellant does not wish to present arguments regarding the patentability of these claims at this time." (App. Br. 16.)

#### ANALYSIS

The Examiner's findings and a conclusion (FF 8) establish a prima facie case of obviousness. The Appellant chose not to contest the Examiner's rejection of claims 12-15. (FF 9.)

#### CONCLUSION

Based on the aforementioned fact, we conclude that the Appellant has shown no error in the Examiner's findings or conclusion about claims 12-15.

#### DECISION

We affirm the rejections of claims 1-8 and 10-22.

Appeal 2008-004578  
Application 09/627,558

No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

llw

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